# How Air Pollution Affects Your Health

High concentrations of ozone and particle pollution in the air can make it difficult for all of us to breathe, especially older adults, young children, and those suffering from heart disease and respiratory problems. When inhaled, ozone and particle pollution inflame and damage the cells that line our lungs, and cause coughing, wheezing and serious asthma attacks in asthma sufferers. Also, numerous studies have even linked particle pollution to premature death.

## **A Forecast for Cleaner Air**

#### The Air Quality Index

MORPC uses the national Air Quality Index (AQI) to inform the public about daily ozone and particle

Purple

Very Unhealthy **201 - 300** 

Red

Unhealthy **151 - 200** 

Orange

Unhealthy for

ensitive Group

101 - 150

Green

0 - 50

pollution levels in central Ohio and how they can affect your health.

#### How do I use it?

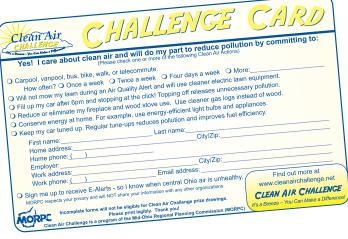
Think of the AQI as a yardstick that runs from 0 to 300. The higher the AQI value, the greater the health concern. When AQI levels reach above 100, air quality is considered to be unhealthy – at first for certain sensitive groups of people, then for everyone as AQI values rise. MORPC issues an Air Quality Alert to the public when pollution levels reach 101 or higher.

To help you quickly understand how local air quality can affect your health, the AQI is divided into five categories: Good, Moderate, Unhealthy for Sensitive

Groups, Unhealthy, and Very Unhealthy. In each level you will find the associated health effects and how you can reduce your exposure.

## Where can I get daily AQI forecasts?

Visit http://airquality.morpc.org to view daily AQI forecasts, or call the Air Quality Hotline toll-free at 888-666-1009. To be notified of an Air Quality Alert by e-mail or fax, call (614) 233-4126 or e-mail airquality@morpc.org.



## It's a Breeze

## - You Can Make a Difference!

No matter what level of participation you choose, your involvement with the Clean Air Challenge means you have something in common with thousands of central Ohio residents who care about the air, health of the community, and the region's quality of life.

The Clean Air Challenge is a voluntary emissions reduction initiative that actively involves the public in making our air cleaner. Participants pledge to take one or more clean air actions to improve air quality such as carpooling, vanpooling, biking, telecommuting, or using electric lawn equipment. The Clean Air Challenge's goal is to recruit 10,000 participants from the following six central Ohio counties: Fairfield, Franklin, Delaware, Knox, Licking and Madison.

## **Support Clean Air!**

Join the Clean Air Challenge today, by visiting **www.cleanairchallenge.net** or call **888-742-7433** to receive a Clean Air Challenge pledge card.





### **Central Ohio Air Pollution**

Central Ohio air contains two harmful pollutants: ozone and fine particles

#### What is Ozone?

Ozone at the earth's surface is harmful to your health. Ground-level ozone should not be confused with the protective layer of ozone in the upper atmosphere, which screens out the sun's damaging ultraviolet rays.

Ozone pollution is mostly caused by cars, lawnmowers and other gasoline-burning engines. Ozone pollution occurs when the chemical emissions from these sources combine with sunlight. This is why ozone levels are

highest on hot, sunny days during the summer.

#### What are Fine Particles?

Fine particles are tiny solid particles and liquid droplets measuring less than 2.5 micrometers in size, or 1/20th the width of a human hair! Particle pollution comes from motor vehicles, power plants, industrial facilities and residential fireplaces.

## **Central Ohio's Air Quality Problem**

Under the Clean Air Act of 1990, the U.S. EPA classified central Ohio as non-attainment for ozone and particle pollution. This means that central Ohio's air does not meet minimum national air quality standards; standards that are designed to protect public health. To get back into attainment, both businesses and individuals will have to work hard to clean up our air by reducing industrial and automobile emissions and use cleaner burning fuels.



Could **Dirty Air** Harm You or Your Children's **Health?** 

# FACT: OVER 50%

## OF CENTRAL OHIO'S AIR POLLUTION IS CONTRIBUTED BY VEHICLES.

When commuters choose to carpool, vanpool and ride the bus to work, less vehicles on the road means less pollution. If you would like to join a carpool or vanpool but don't know where to start, call Ride**Solutions**, our help is free.

Call 1-888-742-RIDE, you'll be asked where you live, work, and your work hours. A custom matchlist of commuters interested in sharing the ride, plus a tip sheet to help set up your carpool is mailed. You can trade driving, or just be a passenger, whatever makes sense for your work commute.

Many people think they need to drive to work because they feel stranded without access to a vehicle. To encourage and support ridesharing, RideSolutions offers the free Guaranteed Ride Home (GRH) program. If you need to take a taxi home, and are registered, **GRH** reimburses 90 percent of the taxi fare. Do you carpool (with a spouse, co-worker, friend, etc.) or ride the bus to work now? You are eligible to register by calling **1-888-742-RIDE**.

Ride**Solutions** maintains almost 40 volunteer vanpools. Each van group travels 20+ one-way miles, taking over 400 cars off the road each workday! Call for the open seat list, or we can look at forming a vanpool from your neighborhood.



#### What Can You Do?

- Keep your car tuned up regular tune-ups can improve fuel efficiency by 15 percent!
- Conserve energy at home use energy efficient light bulbs, insulate your home, turn off lights and appliances when you leave the room.
- Combine your errands into one trip trip chaining saves gas and vehicle wear and
- Refuel your car after 6 p.m. since ozone needs sunlight to form, the vapors that escape when filling up are less likely to add to pollution levels.
- Stop at the click! topping off your gas tank when filling up releases unnecessary pollution into the air.
- Try carpooling, vanpooling or riding the bus - over 50 percent of central Ohio's air pollution is contributed by cars.
- Mow your lawn after 6 p.m. also, consider purchasing electrically-powered lawn and garden equipment, which produce no pollution from exhaust emissions.
- Try walking or biking to complete errands - it's FUN, costs less and good for your health.
- Reduce or eliminate fireplace and wood stove use - also, try using gas logs instead of wood.

And, you can take the Clean Air Challenge See back for easy instructions

